

REMARKS

Initially, Applicant respectfully acknowledges with appreciation that the Examiner has allowed claim 13 and has indicated that dependent claims 6, 7, and 9-12 would be allowable if rewritten in independent form including all the limitations of the base claims and any intervening claims.

Claims 1-13 remain pending in the application.

Reconsideration of the rejection and allowance of the pending application in view of the foregoing amendment and following remarks are respectfully requested.

In the Office Action, claims 1-5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki et al., (JP 2000213787, hereinafter “Okazaki”) in view of Niko et al., (JP 03191245, hereinafter “Niko”) or Uchiyama (JP 09145130). This rejection is respectfully traversed.

It is a disclosed feature of a presently claimed embodiment to provide a method for controlling an air conditioner having a multi-compressor capable of enhancing a correspondence ability to cooling load or a heating load and reducing energy loss.

To achieve the above-noted feature, a method for controlling an air conditioner having a multi-compressor, as recited in claim 1, includes, inter alia, pre-storing a compressing capacity of compressors by a temperature difference between a previous room temperature and a desired temperature preset by a user, and varying the pre-stored compressing capacity based on a temperature difference between a present room temperature and the desired temperature.

Applicant respectfully submits that the cited references relied upon in the rejection under 35U.S.C. 103(a) do not disclose such a combination of features, particularly that a compressing capacity of compressors is pre-stored on the basis of a temperature difference between a previous room temperature and a desired temperature preset by a user, and the pre-stored compressing capacity is varied on the basis of a temperature difference between a present room temperature and the desired temperature.

In the primary Okazaki reference, a plurality of outdoor units 1, 2 and 3 are connected by an equalizing oil pipe. Fixed capacity compressors 5 and 6 are housed in the outdoor units 1 and 2, and a variable capacity compressor 7 (an inverter) is housed in the outdoor unit 3. A central control device 20 comprises two controllers 22 and 23. The controller 22 inputs the operating condition or the like of each of indoor units 8, 9 and 10 to determine the required horsepower of the air conditioning load of a whole building, and also determines the rate according to the value of bit from a measuring instrument 21 to calculate and sets actual operating horsepower. The controller 23 sets the number of outdoor units 1, 2 and 3 to be operated and the operating conditions according to the actual operating horsepower. The operating conditions of each of the outdoor units 1, 2 and 3 are determined by the output from the controller 23, and they are operated. Therefore, the Okazaki reference does not disclose nor suggest the above-noted combination of presently claimed features.

In the Niko reference, a desired room temperature is set and start-up operation is carried out at an operating part 19a. A controller 50 drives an inverter circuit 20 to

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start a compressor 16. Then, a fan control switch 41 is adjusted according to the air flow preset by the operating part 19a, so that a fan motor 13 is brought in operation at a high speed or a low speed. The controller calculates the difference between the detected temperature of a room temperature sensor 54 and the set temperature, and controls the output frequency of the inverter circuit 20 according to the calculated temperature difference (air- conditioning load). Thus, the compressor 16 is controlled according to the air- conditioning load and the room temperature can reach the set temperature with a smooth change. Therefore, Niko does not overcome the deficiencies of Okazaki.

In the Uchiyama, when a capacity of a compressor is calculated for every predetermined period under application of data obtained through a difference temperature calculating circuit 2, a rated capacity memory circuit 5, an ON-OFF discriminating circuit 4 and a load constant table 10, and further in the case that there is a difference temperature signal corresponding to a maximum air conditioning load zone even in one room and a capacity of the compressor is not fulfilled up to an operation allowable value, it is calculated by applying a load constant in the maximum air conditioning load obtained by the load constant memory means. Then, there is provided a compressor capacity control means for use in controlling a capacity of a capacity (frequency) variable type compressor, and also there is provided a valve opening degree control means for calculating a degree of opening of each of electrical expansion valves connected to an indoor device being operated for every predetermined period under application of the aforesaid data and data obtained by the

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memory means for storing an initial degree of opening of the aforesaid valve and for controlling a degree of opening of the electrical expansion valve in response to a result of this calculation. Therefore, Uchiyama does not overcome the deficiencies of Okazaki, either.

Thus, even assuming, arguendo, that the teachings of Okazaki and Niko (or Uchiyama) can be properly combined, the asserted combination of Okazaki and Niko (or Uchiyama) would not result in the embodiment as recited in claim 1. Independent claim 8 includes similar limitations to claim 1, but recites additional features. Thus, claim 8 is believed to be allowable at least for the reasons set forth above with respect to claim 1.

Thus, the rejection of independent claims 1 and 8, and of claims 2-5 dependent from claim 1, under 35 U.S.C. 103(a) is improper for at least these reasons, and withdrawal of such rejection is respectfully requested.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to be attached thereto.

Based on the above, it is respectfully submitted that this application is now in condition for allowance, and a Notice of Allowance is respectfully requested.

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Should the Examiner have any questions or comments regarding this response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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